

2W Miniature Photomultiplier/APD Modules 300V to 2kV

- Photomultiplier tubes & avalanche photo diodes, general purpose
- 300V, 600V, 1kV and 2kV versions
- Positive and negative polarity options
- Remote voltage programming or potentiometer setting
- Voltage monitor & current monitor
- Flashover & short circuit protected
- UL listed



Electrical Specification: 4479 Series

Order Code For 12V Input Types	Order Code For 24V Input Types	Polarity	Output Voltage	Output Current	Connection
4479-101	4479-107	Positive	300V	3mA	Connector
4479-102	4479-108	Positive	600V	3mA	Connector
4479-104	4479-110	Positive	1kV	2mA	Connector
4479-106	4479-112	Positive	2kV	1mA	Connector
4479-2XX	4479-2XX	Negative	As above for negative output		

12V Types		24V Types	
Input voltage range	+11V to +15Vdc. Maximum input voltage surge <5 seconds is 18V.	Input voltage range	+22V to +28V dc. Maximum input voltage surge <5 seconds is 32V.
Input current	400mA at full load and 125mA at zero load (at 12V).	Input current	250mA at full load and 100mA at zero load (at 24V).
Control of the output	0 to +5V for 0 to 100% rated output voltage, $Z_{in} = 1M\Omega$. Maximum slew rate: 50V/ms typ.	Control of the output	0 to +10V for 0 to 100% rated output voltage, $Z_{in} = 1M\Omega$. Maximum slew rate: 50V/ms typ.
Fixed reference output	+5V $\pm 0.05\%$. Maximum current: 3mA. Temperature coefficient: 50ppm/ $^{\circ}C$.	Fixed reference output	+10V $\pm 0.05\%$. Maximum current: 3mA. Temperature coefficient: 50ppm/ $^{\circ}C$.
Variable reference output	0 to +5V, multi-turn potentiometer.	Variable reference output	0 to +10V, multi-turn potentiometer.
Voltage monitor	0 to +5V for zero to 100% of output voltage. Accuracy $\pm 1\% \pm 50mV$. $Z_{out} = 10k\Omega$.	Voltage monitor	0 to +10V for zero to 100% of output voltage. Accuracy $\pm 1\% \pm 50mV$. $Z_{out} = 10k\Omega$.
Current monitor	0 to +5V for zero to 100% of output current. Accuracy $\pm 1.5\% \pm 50mV$. $Z_{out} = 10k\Omega$.	Current monitor	0 to +10V for zero to 100% of output current. Accuracy $\pm 1.5\% \pm 50mV$. $Z_{out} = 10k\Omega$.

Electrical Specification (12V & 24V Input Types)

High frequency ripple	<6mVp-p, <1mVp-p typical
Low frequency noise	<12mVp-p, <4mVp-p typical
Line regulation	<20ppm over input voltage
Load regulation	<20ppm for zero to full load
Drift (after 1 hour warm up)	<15ppm in any 15 minute period, <50ppm in any 8 hour period
Temperature coefficient	<50ppm/ $^{\circ}C$ at maximum rated output
Protection	Proof against output short circuit (current limited to 110%-180% of max depending on model). Input protected against polarity reversal
Safety approved to	UL1950 Marked

File code: LS_DS_4479-Series_en/09/24

4479 Series

Mechanical Specification

Dimensions	95.2 x 49.0 x 15.0 mm (3.75" x 1.94" x 0.6"). 2 off mounting holes on 88.8mm (3.5") centres
Weight	70g (2.5 oz.) approximately
Input / control	2 off (4 way & 5 way) 0.1" pitch (Molex) connectors
Output	Fly lead, RG178B/U cable 0.5m (19") long also available with RG58 or other types to special order

Environmental Specification

Temperature, operating	-10°C to +50°C	Humidity (RH) <31°C non-condensing	80% maximum
Temperature, storage	-20°C to +75°C	Humidity (RH) >30°C non-condensing	Decrease linearly to 50% at 40°C
Altitude, operating	Up to 2,000m	Altitude, storage	Up to 18,000m

The unit is to be supplied from a current limited supply providing 24V dc, impulse limited to overvoltage Category I (of IEC60364-4-443)
For use in an environment of pollution degree 2.

Pin Assignments

1	Power input (+12V or +24V dc)
2	Power return / 0V
3	Power return / 0V
4	Fixed reference output
5	Control input
6	Variable reference output
7	Voltage monitor
8	Current monitor

Dimensions

Dimensions in mm
Projection/first angle

